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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,933	02/14/2002	Pangan Ting	06720.0084	5317

7590 07/29/2004

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Washington, DC 20005-3315

EXAMINER

PEREZ, JULIO R

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 07/29/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,933

Applicant(s)

TING ET AL.

Examiner

Julio R Perez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by applicant's submission of prior art Subramanian (6721581).

Regarding claim 1, Subramanian discloses an upgradeable and extendable wireless communication system, comprising: a plurality of layers, each layer including: a plurality of configurable computational units capable of implementing operation of wireless digital communication functions (col. 4, lines 38-67, the system comprises a number of elements to implement a digital communication); a plurality of data flow components for forming paths between ones of said computational units and having means for storing data (col. 4, lines 38-67; col. 5, lines 1-30; col. 6, lines 54-66, computational elements within the system comprise means to maintain data flowing and means for storing information); and a plurality of control flow components for forming a signaling-exchange network between ones of said computational units (col. 4, lines 38-67; col. 5, lines 1-67; col. 6, lines 1-30, signaling is provided within the system).

Regarding claim 2, Subramanian discloses the wireless communication system further including means for at least one layer of said plurality of layers to communicate

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with at least another layer of said plurality of layers (col. 4, lines 48-58, a number of devices are provided that interact with one another).

Regarding claim 3, Subramanian discloses the wireless communication system of claim 1, wherein the plurality of configurable computational units comprise a RF front-end waveform kernel set, a re-configurable kernel set and a reprogrammable kernel set (col. 5, lines 36-39; col. 6, lines 1-3, sets of Kernels are provided, which used the air as a medium for communication).

Regarding claim 4, Subramanian discloses the wireless communication system, wherein the plurality of data flow components comprises a layer-memory structure and a layer-router structure (col. 4, lines 14-24).

Regarding claim 5, Subramanian discloses the wireless communication system, wherein the plurality of control flow components comprises a layer-memory structure and a layer-bus structure (col. 6, lines 1-24, memory structures and memory structures are provided within the system).

Regarding claim 6, Subramanian discloses a method of programming and configuring components of an upgradeable and extendable wireless communication system in order to implement multiple wireless communication standards, services, and applications, comprising: identifying one of the application, standard or service to be implemented (col. 5, lines 31-41, several applications are served and implemented by the system); compiling software associated with the identified application, standard or service (col. 5, lines 56-67); determining the utilization of hardware resources (col. 5, lines 56-67, several hardware and software resources are utilized); and configuring

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hardware resources to meet the application, standard or service required (col. 5, lines 56-67, the resources of the hardware are configured appropriately).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the art with respect to wireless digital communications and software to implement multiple standard applications.

US Pat. No. 6349204 to Goetz et al.

Control program data pursuant


US Pub. No. 20030181218 to Mukai et al.


Communications apparatus and
Method

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R Perez whose telephone number is (703) 305-8637. The examiner can normally be reached on 7:00 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JP
7/25/04


DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600